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ABSTRACT

This skills inventory for travel and tourism occupations was developed by a technical committee in Montana to assist in the development of model curricula and to address state labor market needs. The committee included employers from the travel and tourism industry, members of trade and professional associations, and educators. The validated task list and defined job clusters are intended to provide information on the type and level of knowledge and skills needed for entry, retention, and advancement in Montana tourism occupations. The guide contains the following: (1) Montana supply and demand occupational information; (2) occupational characteristics of selected jobs in the tourism industry; and (3) task lists for major areas of training in travel and tourism--lodging services, travel services, food and beverage services, and entertainment, cultural, and sport-related services. The document includes information on training time for tourism occupations; mathematics and language training time; physical demands; and environmental working conditions. (KC)

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TOURISM

Montana Center for Research, Curriculum and Personnel Development

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TECHNICAL COMMITTEE ON OCCUPATIONAL CURRICULUM DEVELOPMENT

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TOURISM TECHNICAL

ADVISORY COMMITTEE

ON CURRICULUM DEVELOPMENT

JOB CLUSTERS, COMPETENCIES AND TASK ANALYSIS

Completed by the Montana
Center for Vocational Education Research,
Curriculum and Personnel Development
Located at Northern Montana College
P.O. Box 7751
Havre, Montana 59501

December 1988

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  Saint Martin's College, Lacey, Washington

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  Labor & Industry, Helena, Montana

- U.S. Department of Health, Education and Welfare,
  Washington, D.C.

- Oregon Department of Education, Salem, Oregon

INTRODUCTION

The Carl D. Perkins Vocational Education Act (Public Law 98-524) was enacted in 1984 to replace the Vocational Education Act of 1963 and its subsequent amendments. It is the major vehicle for federal support of vocational education to the states.

The Perkins Act heralded a desire by Congress to better target the responsiveness of vocational and technical education and training to the requirements of the marketplace. The Act sets forth guidelines for implementing this desire by mandating significantly greater involvement of business and industry in the curriculum development process through the mechanism of State Technical Committees.

The Montana State Office of the Commissioner of Higher Education, with the assistance of the State Council for Vocational Education designated 14 distinct business and industry areas for future Technical Committee organization. Five Technical Committees were established for 1988-89 to assist in the development of model curricula and to address state labor market needs. The five committees were responsible for developing an inventory of skills that may be used to define state-of-the-art model curricula for Montana. The five designated committees are:

- TOURISM AND TRAVEL
- AGRICULTURE
- FORESTRY AND LUMBERING
- HEALTH CARE
- MINING AND MINERALS

Montana's Technical Committees represented employers from the industry or occupations for which the committee was established; members from trade or professional organizations representing relevant occupations, and members of organized labor (where appropriate).

Committee members met twice during Fall 1988 to validate relevant skills inventory lists for the foundation of curriculum development. Staff from the Center for Vocational Education served as facilitators. This validated task list and defined job clusters should provide the type and level of knowledge and skills needed for entry, retention, and advancement in Montana.

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MONTANA SUPPLY AND DEMAND INFORMATION

A continuing challenge facing education and training institutions is to identify, design, and offer training programs that serve both the needs of individual participants and the needs of the economy and society as a whole. It is crucial that training programs designed to prepare individuals for specific occupations be realistic in light of anticipated job openings (demand) and the expected number of persons available for and prepared to fill them (supply).

The following projected information can assist in looking into the future job market with some confidence. Through the use of the information individuals and jobs can be matched, thereby decreasing unemployment and inereasing job satisfaction. This will also benefit the business community and taxpayers. Through the use of this information, better decisions can be made for the future by having a more realistic knowledge of Montana's employment trends.

The following tables and statistics have been taken from the Montana Supply and Demand Report, Fifth Edition, October 1988, Montana State Occupational Information, Coordinating Committee.

MONTANA TOURISM AND TRAVEL OCCUPATIONAL INFORMATION DEMAND REPORT
1986-1995

OCCUPATIONAL TITLE	1986 EMPLOY.	1995 EMPLOY.	EST. ANNUAL OPENINGS
DESIGNATED COMMON JOB TITLES IN TWO OR MORE OCCUPATIONAL AREAS:			
Marketing, Advertising, Public Relations	700	773	21
Counter & Rental Clerks	306	375	19
Cashiers	6397	7807	324
Receptionists, Information Clerks	2059	2289	75
Guards and Watch Guards	670	746	60
Janitors and Cleaners, except Maids	5610	6594	498
Food Service and Lodging Managers	1211	1365	65
Hosts & Hostesses, Restaurant/Lodging	522	615	28
Waiters and Waitresses	6699	7743	213
Counter Attendants	841	952	14
Dining Room and Bartender Helpers	1051	1211	29
Guides	31	37	3
LODGING SERVICES			
Reservation & Transportation Ticket Agents	341	460	22
Hotel Desk Clerks	786	829	65
Baggage Porters and Bellhops	93	91	4
Institutional Housekeepers	422	504	72
TRAVEL SERVICES			
Travel Agents	283	374	23
Reservation & Transportation Ticket Agents	341	460	22
Travel Clerks	40	41	1
RECREATION SERVICES			
Recreation Workers	264	286	5
Amusement and Recreation Attendant	508	672	26
ENTERTAINMENT SERVICES			
Ushers, Lobby Attendants, Ticket Takers	93	89	5
Bartenders	2931	3358	151
CULTURAL SERVICES			
Curators, Archivists, Museum Workers	16	23	2
Animal Caretakers	83	69	- 1
FOOD AND BEVERAGE SERVICES			
Bakers, Bread and Pastry	518	604	32
Restaurant Cooks	2603	3119	170
Institutional or Cafeteria Cooks	1317	1590	88
Fast Food/Short Order Cooks	2178	2414	105
Food Preparation Workers	3379	3988	88
Comb. Food Preparation, Servers	3702	4111	97
All Other Food Service Workers	817	950	44
SPORTS SERVICES			
Recreation Workers	264	286	5

MONTANA SUMMARY OF JOB CLUSTERS IN DESCENDING ORDER BY DEMAND, (ESTIMATED ANNUAL OPENINGS VS. TRAINING COMPLETERS)

CLUSTER TITLE	DEMAND	SUPPLY
Sales	1482	554
Institutional and Building Service	822	117
Food Production	523	132
Nursing Assistant	262	138
Heavy Equipment Repair and Operation	229	96
Office and Information Services	188	76
Recreation and Tourism	156	205
Other Medical Technology	150	238
Horticulture and Landscaping	113	24
Electrical and Electronic Technology	106	279
Natural Resources Technology	97	217
Forestry and Lumber Production	64	129
Medical Laboratory	59	193
Dental Technology	56	31
Agriculture Business	55	178
Agriculture Production	36	440
Radiologic Technology	31	22
Medical Records	27	47
Environmental Control Technology	25	24
Marketing Management	14	87
Agriculture Mechanics	12	37
Mechanical Technology	10	105
Emergency Medical Technology	9	1
Fish and Wildlife	3	75

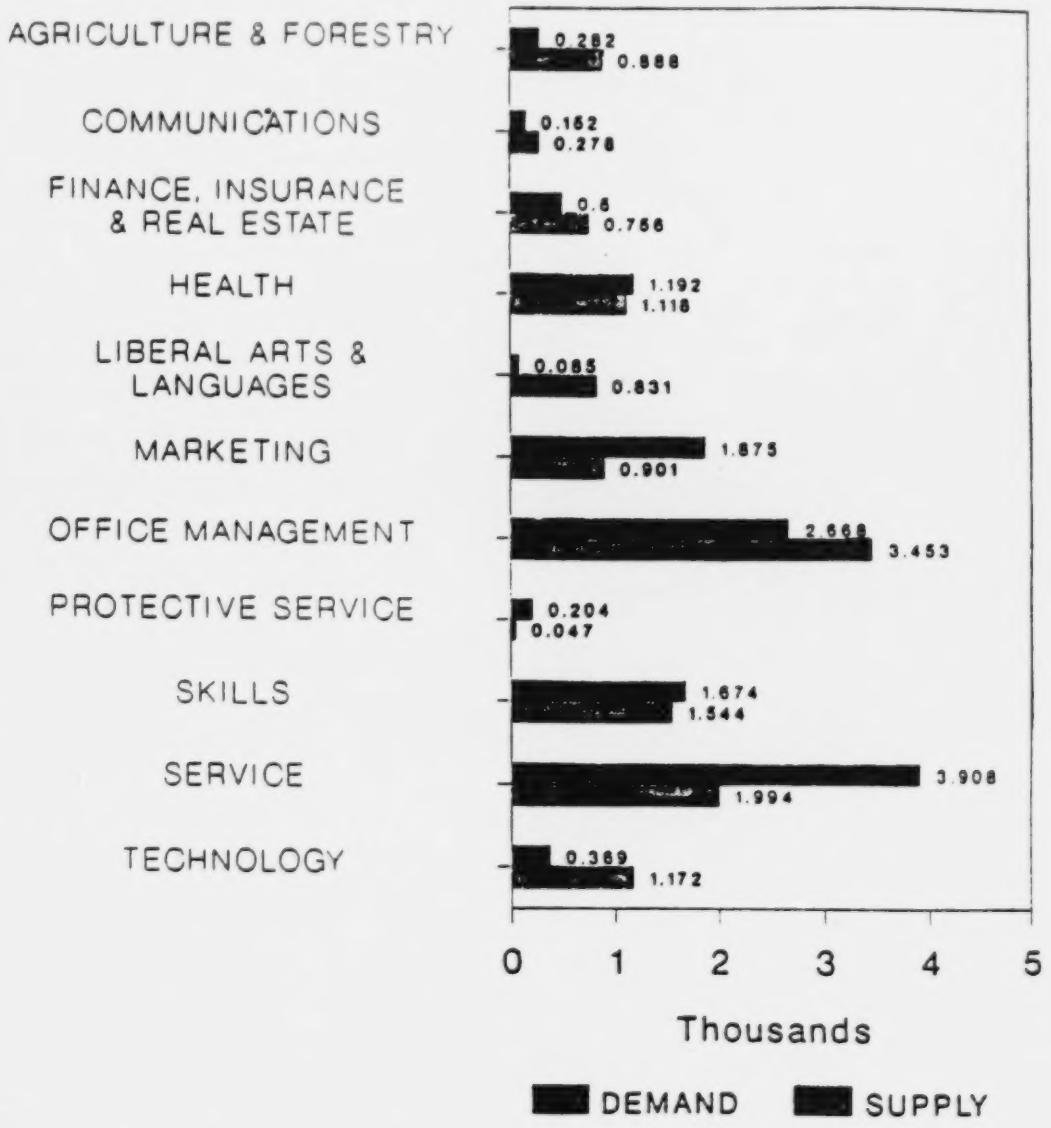
These clusters are representative of clusters found within one or more of the five designated technical advisory committees industry areas: Agriculture, Forestry, Mining and Minerals, Travel and Tourism, and Health Services.

MONTANA OCCUPATIONS RANKED BY ANNUAL OPENINGS TO 1995

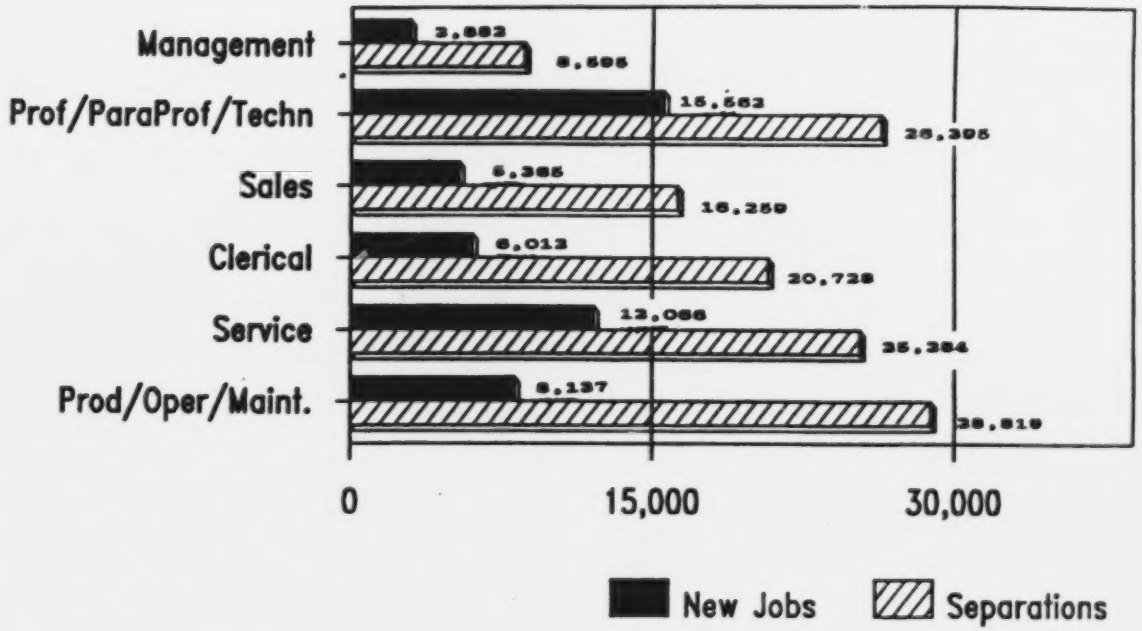
OCCUPATIONAL TITLE	ANNUAL OPENINGS TO 1995
Salespersons, Retail	604
Janitors and Cleaners, excluding Maids	498
Cashiers	324
Waiters and Waitresses	213
Nursing Aides and Orderlies	204
Maids and Housekeeping Cleaners	187
Restaurant Cooks	170
Bartenders	151
Licensed Practical Nurses	108
Gardeners and Groundskeepers	105
Fast Food and Short-Order Cooks	105
Combination Food Preparations and Service	97
Institutional or Cafeteria Cooks	88
Food Preparation Workers	88
Receptionists, Information Clerks	75
Institutional Housekeepers	72
Hotel Desk Clerks	65
Food Service and Lodging Managers	65
Guards and Watch Guards	60
Grader, Dozer, Scraper Operators	50
Home Health Aides	44
All Other Foods Service Workers	44
All Other Cleaning, Building Services	43
Bus, Truck, Diesel Eng. Mechanic	40
Bakers, Bread and Pastry	32
Radiologic Technologists and Technicians	30
Butchers and Meat Cutters	29
Dining Room and Bartender Helpers	29
Mobile Heavy Equipment Mechanics	28
Hosts and Hostesses: Restaurant and Lounges	28
Medical Secretaries	27
Amusement and Recreation Attendants	26
All Other Health Service Workers	25
Welders and Cutters	25
All Other Agriculture, Forestry, Fishery Personnel	24
Advertising Sales Agents	23
Travel Agents	23
Machinists	23
Reservation and Transportation Ticket Agent	22
Marketing, Advertising, Public Relations Managers	21
Forest and Conservation Workers	19
Counter and Rental Clerks	19
Excavation Loading Machine Operators	19
Dental Assistants	18
All Other Machinery Mechanics	17
Farm and Home Management Advisors	16
Fallers and Buckers	16
Medical/Clinical Laboratory Technologists	16

Electrical and Electronic Technicians	16
Surveying and Mapping Technicians	16
Medical Assistants	14
Medical Records Technicians and Technologists	13
Sawing Machine Operator, Tender	13
Farm Purchasing Agents and Buyers	11
Machinery Maintenance Workers	11
Millwrights	10
Farm Equipment Mechanics	9
Nursery Workers	8
Logging Tractor Operators	7
Medical/Clinical Laborator Technicians	6
Mining and Related Managers	6
Emergency Medical Technicians	6
Tool Grinders, Filers, Sharpeners	6
Log Handling Equipment Operators	5
Physical Therapy Assistant	5
Recreation Workers	5
Ushers, Lobby Attendants, Ticket Takers	5
Biological, Agriculture Food Technicians	4
First Line Supervisor, Agriculture, Forestry, Fisheries	4
Pharmacy Assistants	4
Choke Setters	3
Crane and Towing Operators	3
Wood Machinists	3
Parking Lot Attendants	3
Well Head Pumpers	3
Curators, Archivists, Museum Technicians	2
Head Sawyers	2
Mine Cutting Machine Operators	2
Agriculture Production Graders and Sorters	1
Log Graders and Scalers	1
Nuclear Medicine Technologists	1
Occupational Therapy Assistants	1

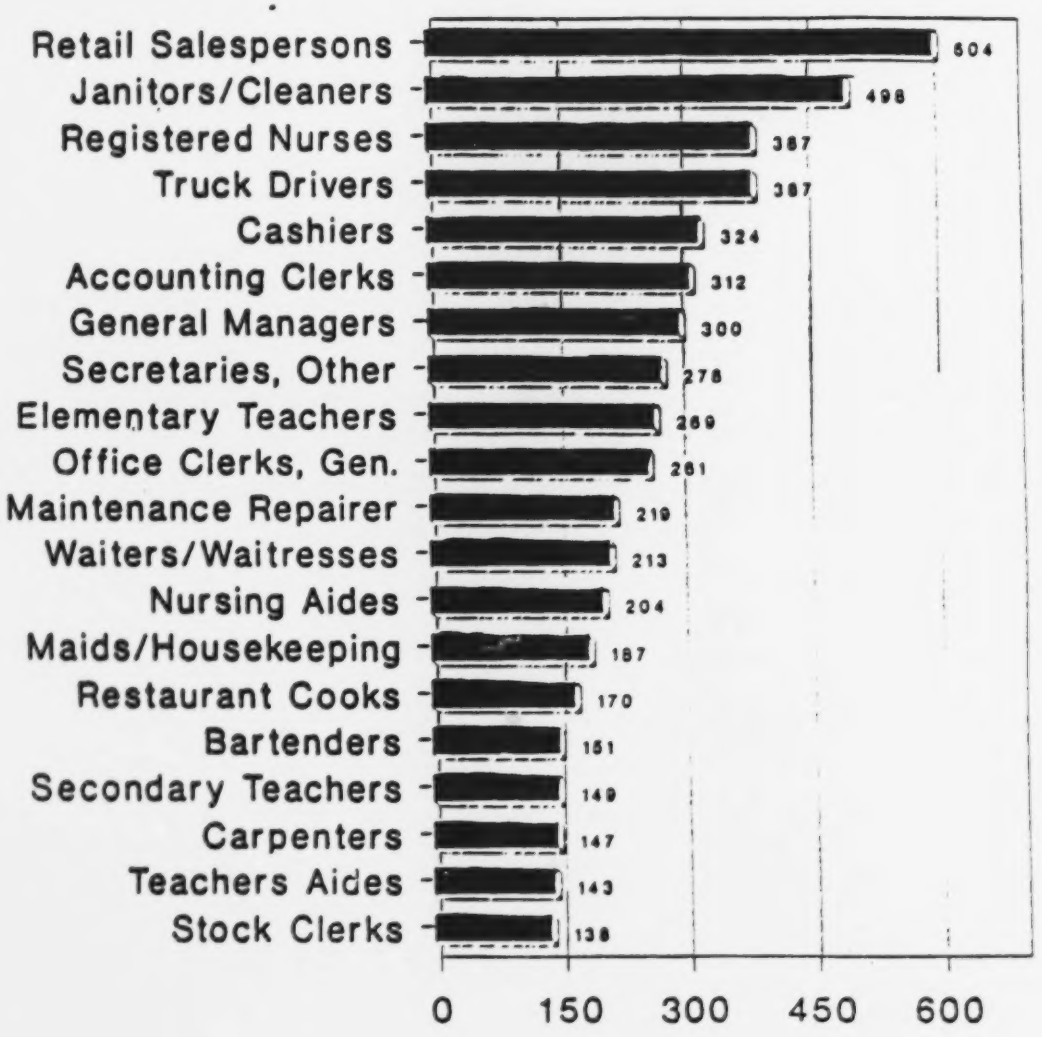
MONTANA CLUSTERS
DEMAND VS. SUPPLY
ESTIMATED ANNUAL OPENINGS VS. TRAINING COMPLETERS



Total Job Openings
Montana Occupations
Growth vs Separations



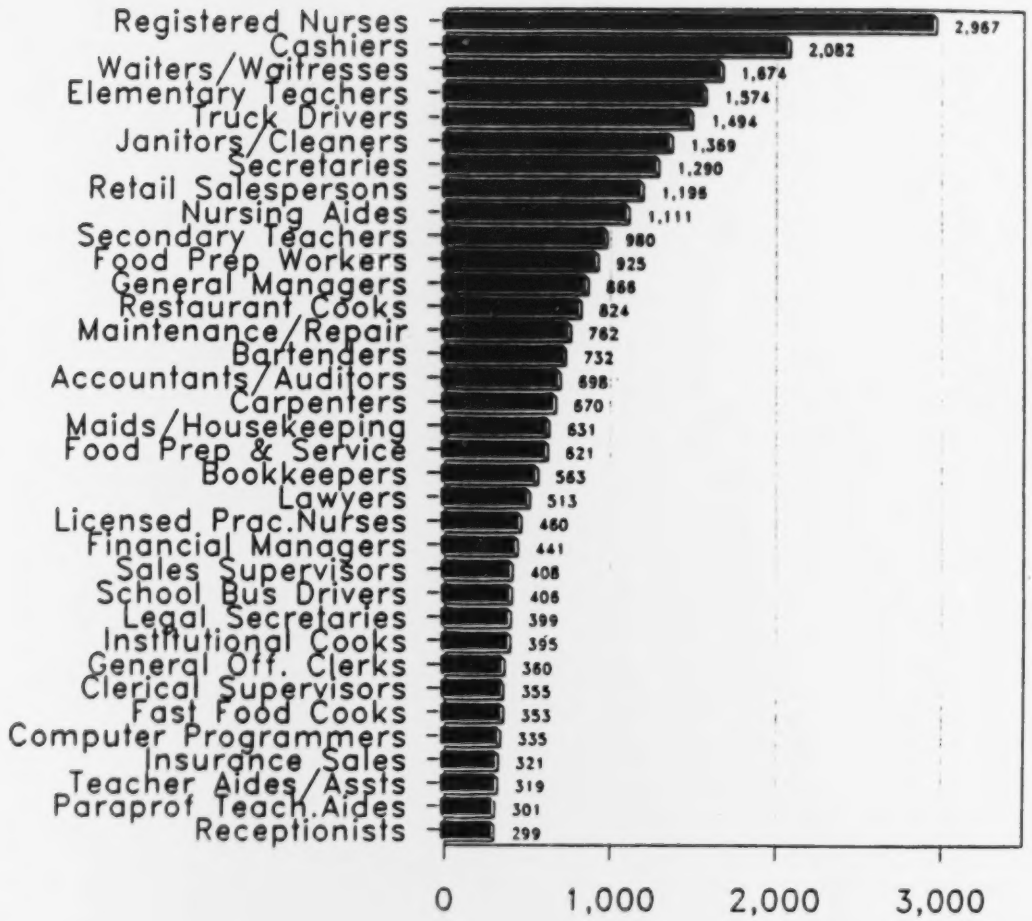
MONTANA
HIGH GROWTH OCCUPATIONS
Estimated Annual Openings to 1995



Montana Job Growth

High Growth Careers

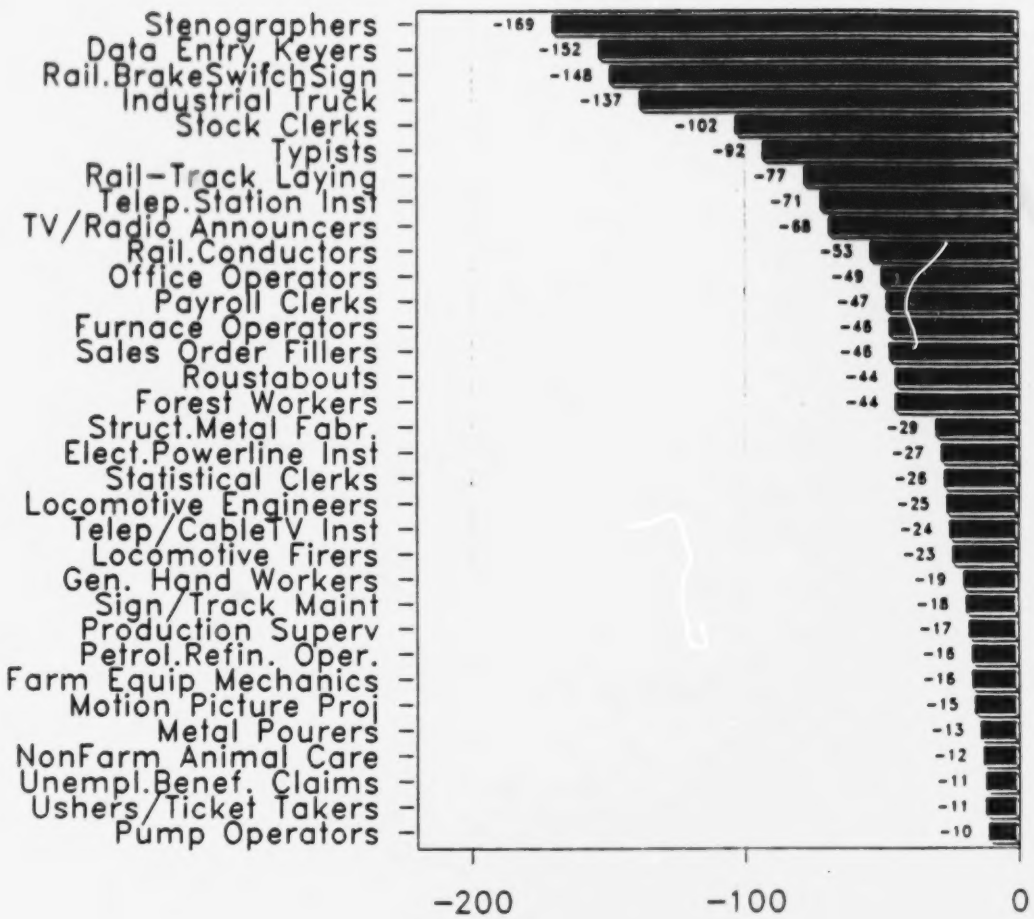
Specific Jobs



Montana Job Growth

Declining Job Areas

Specific Jobs



Occupational Characteristics of Selected Jobs in the Tourism Industry

The following list of occupations are representive of the Tourism Industry. While not all of them are found in Montana, they do however represent the most common job titles in the industry.

The selected occupational characteristics are taken from the Dictionary of Occupational Titles and the code to the numbers or letters found in each column is given on the pages following this list. The column marked SVP identifies the Specific Vocational Preparation, or the amount of time required to be trained for the job. The GED columns are marked R M L and are coded to describe the reading, mathematical and language development level necessary to meet the job requirements. The physical demands are noted in the next six columns and the environmental working conditions are coded in the last seven columns.

CIP	DICTIONARY OF OCCUPATIONAL TITLES			GED			PHYSICAL	WORKING
CODE	CODE	TITLE	SVP	R	M	L	DEMANDS	CONDITIONS
(06.0701)	187.117-038	MANAGER, HOTEL OR MOTEL	8	5	5	5	S 5	I
(06.0701)	187.167-122	MANAGER, HOTEL RECREATIONAL FACILITIES	7	4	4	4	L 456	I
(06.0702)	187.167-210	DIRECTOR, FOOD AND BEVERAGE	8	4	4	4	L 456	I
(06.0704)	187.167-026	DIRECTOR, FOOD SERVICES	7	5	4	4	L 56	I
(06.0704)	185.137-010	MANAGER, FAST FOOD SERVICES	7	4	4	4	L 456	I
(06.0704)	187.167-106	MANAGER, FOOD SERVICE	7	4	4	4	L 456	I
(31.0201)	153.137-010	MANAGER, POOL	4	3	3	3	H 456	I 4
(20.0202)	159.124-010	COUNSELOR, CAMP	6	4	2	4	L2 45	B
(06.0702)	187.137-010	RECREATION SUPERVISOR	8	5	3	4	L 456	I
(17.0401)	195.227-010	PROGRAM AIDE, GROUP WORK	6	5	3	4	L 5	B
(20.0202)	195.227-014	RECREATION LEADER	7	5	3	5	L 5	B
(00.0000)	352.167-010	DIRECTOR, SOCIAL	6	4	3	4	L 5	B
(08.1105)	252.157-010	TRAVEL AGENT	4	3	3	3	S 56	I
(01.0305)	379.167-010	FISH AND GAME WARDEN	6	4	3	4	M 3456	O 6
(08.0905)	312.474-010	BARTENDER	3	3	2	2	L 456	I
(08.0903)	353.161-010	GUIDE, HUNTING AND FISHING	7	4	3	3	H 3456	O
(08.0903)	353.164-010	GUIDE, ALPINE	7	4	3	4	V23456	0234 67
(08.0903)	353.167-010	GUIDE, TRAVEL	6	4	3	4	L 45	I
(08.0903)	353.363-010	GUIDE, SIGHTSEEING	4	3	2	3	L 456	I
(08.0903)	353.367-010	GUIDE	3	3	1	2	L 5	B
(08.0903)	353.367-014	GUIDE, ESTABLISHMENT	5	4	2	3	L 5	I
(08.0903)	353.367-018	GUIDE, PLANT	3	3	2	3	L 5	B
(01.0607)	406.137-010	GREENSKEEPER 1	6	4	3	3	H23456	O 6
(01.0607)	406.137-014	SUPERINTENDENT, GREENS	7	4	4	4	L 56	I

Specific Vocational Preparation
(Training Time)

This represents the amount of time required to learn the techniques, acquire information, and develop the facility needed for average performance in a specific job-worker situation. The training may be acquired in a school, work, military, institutional, or a vocational environment. It does not include orientation training required of even every fully qualified worker to become accustomed to the special conditions of any new job. Specific vocational training includes training given in any of the following circumstances:

a. Vocational education (such as high school commercial or shop training, technical school, art school, and that part of college training which is organized around a specific vocational objective);
b. Apprentice training (for apprenticeable jobs only);
c. In-plant training (given by an employer in the form of organized classroom study);
d. On-the-job training (serving as learner or trainee on the job under the instruction of a qualified worker);
e. Essential experience in other jobs (serving in less responsible jobs which lead to the higher grade job or serving in other jobs that qualify).

The following is an explanation of the various levels of specific vocational preparation.

Short demonstration.

Level	Time
1	Short demonstration.
2	Anything beyond short demonstration up to and including 30 days.
3	Over 30 days up to and including 3 months.
4	Over 3 months up to and including 6 months.
5	Over 6 months up to and including 1 year.
6	Over 1 year up to and including 2 years.
7	Over 2 years up to and including 4 years.
8	Over 4 years up to and including 10 years.
9	Over 10 years.

Mathematical Development and Language Development (Training Time)

Commonly referred to as "tool knowledges," these embrace those aspects of education (formal and informal) of a general nature that contribute to the acquisition of such skills but do not have a recognized, fairly specific, occupational objective, ordinarily obtained in elementary, high school, or college environs and augmented by past experiences and self-study. They provide linkage between norms used for interpretation of the Basic Occupational Literacy Test (BOLT) scores and level requisites for DOT occupations. Following are the definitions and scale levels applicable to each:

a. Mathematical Developmental or Arithmetic Computation (M): The acquisition of basic mathematical skills, not specifically vocationally oriented, such as the ability to solve arithmetic, algebraic, and geometic problems ranging from fairly elemental to dealing with abstractions.

b. Language Development or Literacy Training (L): The acquisition of language skills, not specifically vocationally oriented, such as mastery of an extensive vocabulary; use of correct sentence structure, punctuation, and spelling; and an appreciation of literature.

Level	*Mathematical Development*	*Language Development*
6	Advanced calculus: Work with limits, continuity, real number systems, mean value theorems, and implicit function theorems. Modern algebra: Apply fundamental concepts of theories of groups, rings, and fields. Work with differential equations, linear algebra, infinite series, advanced operations methods, and functions of real and complex variables. Statistics: Work with mathematical statistics, mathematical probability, and applications, experimental design, statistical inference, and econometrics.	Reading: Read literature, book and play reviews, scientific and technical journals, abstracts, financial reports, and legal documents. Writing: Write novels, plays, editorials, journals, speeches, manuals, critiques, poetry, and songs. Speaking: Conversant in the theory, principles, and methods of effective and persuasive speeking, voice and diction, phonetics, and discussion and debate.

Level	*Mathematical Development*	*Language Development*
5	**Algebra:** Work with exponents and logarithms, linear equations, quadratric equations, mathematical induction and binomial theorems, and permutations. **Calculus:** Apply concepts of analytical geometry, differentiations and integration of algebraic functions with applications. **Statistics:** Apply mathematical operations to frequency distributions, reliability, and validity of tests, normal curve, analysis of variance, correlation techniques, chi-square application and sampling theory, and factor analysis.	Same as level 6
4	**Algebra:** Deal with system of real numbers; linear, quadratic, rational, exponential; logarithmic, angle, and circular functions, and inverse functions; related algebraic solution of equations and inequalities; limits and continuity, and probability and statistical inference. **Geometry:** Deductive axiomatic geometry, plane and solid; and rectangular coordinates. **Shop Math:** Practical application of fractions, percentages, ratio and proportion, mensuration, logarithms, slide rule, practical algebra, geometric construction, and essentials of trigonometry.	**Reading:** Read novels, poems, newspapers, periodicals, journals, manuals, dictionaries, thesauruses, and encyclopedias. **Writing:** Prepare business letters, expositions, summaries, and reports, using prescribed format, and conforming to all rules of punctuation, grammar, diction, and style. **Speaking:** Participate in panel discussions, dramatizations, and debates. Speak extemporaneously on a variety of subjects.
3	Compute discount, interest, profit, and loss; commission, markups, and selling price; ratio and proportion, and percentages. Calculate surfaces, volumes, weights, and measures. **Algebra:** Calculate variables and formulas, monomials and polynomials; ratio and proportion variables; and square roots and radicals. **Geometry:** Calculate plane and solid figures, circumference, area, and volume. Understand kinds of angles, and properties of pairs and angles.	**Reading:** Read a variety of novels, magazines, atlases, and encyclopedias. Read safety rules, instructions in the use and maintenance of shop tools and equipment, and methods and procedures in mechanical drawing and layout work. **Writing:** Write reports and essays with proper format, punctuation, spelling, and grammar, using all parts of speech. **Speaking:** Speak before an audience with poise, voice control, and confidence, using correct English and well-modulated voice.

Level	*Mathematical Development*	*Language Development*
2	Add, subtract, multiply, and divide all units of measure. Perform the four operations with like common and decimal fractions. Compute ratio, rate, and percent. Draw and interpret bar graphs. Perform arithmetic operations involving all American monetary units.	Reading: Passive vocabulary of 5,000-6,000 words. Read at rate of 190-215 words per minute. Read adventure stories and comic books, looking up unfamiliar words in dictionary for meaning, spelling, and pronunciation. Read instructions for assembling model cars and airplanes. Writing: Write compound and complex sentences, using cursive style, proper end punctuation, and employing adjectives and adverbs. Speaking: Speak clearly and distinctly with appropriate pauses and emphasis, correct pronunciation, variations in word order, using present, perfect, and future tenses.
1	Add and subtract two digit numbers. Multiply and divide 10's and 100's by 2, 3, 4, 5. Perform the four basic arithmetic operations with coins as part of a dollar. Perform operations with units such as cup, pint, and quart; inch, foot, and yard; and ounce and pound.	Reading: Recognize meaning of 2,500 (two- or three-syllable) words. Read at a rate of 95-120 words per minute. Compare similarities and differences between words and between series of numbers. Writing: Print simple sentences containing subject, verb, and object, and series of numbers, names, and addresses. Speaking: Speak simple sentences, using normal word order, and present and past tenses.

Physical Demands

The physical demands listed in this publication serve as a means of expressing both the physical requirements of the job and the physical capacities (specific physical traits) a worker must have to meet those required by many jobs (perceiving by the sense of vision), and also the name of a specific capacity possessed by many people (having the power of sight). The worker must possess physical capacities at least in an amount equal to the physical demands made by the job.

The Factors

1. Strength: This factor is expressed in terms of *Sedentary, Light, Medium, Heavy,* and *Very Heavy.* It is measured by involvement of the worker with one or more of the following activities:

   a. Worker position(s):

      (1) *Standing:* Remaining on one's feet in an upright position at a workstation without moving about.
      (2) *Walking:* Moving about on foot.
      (3) *Sitting:* Remaining in the normal seated position.

   b. Worker movement of objects (including extremities used);

      (1) *Lifting:* Raising or lowering an object from one level to another (includes upward pulling).
      (2) *Carrying:* Transporting an object, usually holding it in the hands or arms or on the shoulder.
      (3) *Pushing:* Exerting force upon an object so that the object moves away from the force (includes slapping, striking, kicking, and treadle actions).
      (4) *Pulling:* Exerting force upon an object so that the object moves toward the force (includes jerking).

The five degrees of Physical Demands Factor No. 1 (strength), are as follows:

S Sedentary Work

Lifting 10 lbs. maximum and occasionally lifting and/or carrying such articles as dockets, ledgers, and small tools. Although a sedentary job is defined as one which involves sitting, a certain amount of walking and standing is often necessary in carrying out job duties. Jobs are sedentary if walking and standing are required only occasionally and other sedentary criteria are met.

L Light Work

Lifting 20 lbs. maximum with frequent lifting and/or carrying of objects weighing up to 10 lbs. Even though the weight lifted may be only a negligible amount, a job is in this category when it requires walking or standing to a significant degree, or when it involves sitting most of the time with a degree of pushing and pulling of arm and/or leg controls.

M Medium Work

Lifting 50 lbs. maximum with frequent lifting and/or carrying of objects weighing up to 25 lbs.

H Heavy Work

Lifting 100 lbs. maximum with frequent lifting and/or carrying of objects weighing up to 50 lbs.

V Very Heavy Work

Lifting objects in excess of 100 lbs. with frequent lifting and/or carrying of objects weighing 50 lbs. or more.

2. *Climbing and/or Balancing*
   (1) Climbing: Ascending or decending ladders, stairs, scaffolding, ramps, poles, ropes, and the like, using the feet and legs and/or hands and arms.
   (2) Balancing: Maintaining body equilibrium to prevent falling when walking, standing, crouching, or running on narrow, slippery, or erratically moving surfaces; or maintaining body equilibrium when performing gymnastic feats.

3. *Stooping, Kneeling, Crouching, and/or Crawling:*
   (1) Stooping: Bending the body downward and forward by bending the spine at the waist.
   (2) Kneeling: Bending the legs at the knees to come to rest on the knee or knees.
   (3) Crouching: Bending the body downward and forward by bending the legs and spine.
   (4) Crawling: Moving about on the hands and knees or hands and feet.

4. *Reaching, Handling, Fingering, and/or Feeling:*
   (1) Reaching: Extending the hands and arms in any direction.
   (2) Handling: Seizing, holding, grasping, turning, or otherwise working with the hand or hands (fingering not involved).
   (3) Fingering: Picking, pinching, or otherwise working with the fingers primarily (rather than with the whole hand or arm as in handling).
   (4) Feeling: Perceiving such attributes of objects and materials as size, shape, temperature, or texture, by means ot receptors in the skin, particularly those of the fingertips.

5. *Talking and/or Hearing:*
   (1) Talking: Expressing or exchanging ideas by means of the spoken word.
   (2) Hearing: Perceiving the nature of sounds by the ear.

6. *Seeing:* Obtaining impressions through the eyes of the shape, size, distance, motion, color, or other characteristics of objects. The major visual functions are: (1) acuity, far and near, (2) depth perception, (3) field of vision, (4) accommodation, and (5) color vision. The functions are defined as follows:

   (1) Acuity, far—clarity of vision at 20 feet or more. Acuity, near—clarity of vision at 20 inches or less.
   (2) Depth perception—three-dimensional vision. The ability to judge distance and space relationships so as to see objects where and as they actually are.
   (3) Field of vision—the area that can be seen up and down or to the right or left while the eyes are fixed on a given point.
   (4) Accommodation—adjustment of the lens of the eye to bring an object into sharp focus. This item is especially important when doing near-point work at varying distances from the eye.
   (5) Color vision—the ability to identify and distinguish colors.

Environmental Working Conditions

Environmental conditions are the physical surroundings of a worker in a specific job.

1. *Inside, Outside, or Both:*
   I Inside: Protection from weather conditions but not necessarily from temperature changes.
   O Outside: No effective protection from weather.
   B Both: Inside and outside.

A job is considered "inside" if the worker spends approximately 75 percent or more of the time inside, and "outside" if the worker spends approximately 75 percent or more of the time outside. A job is considered "both" if the activities occur inside or outside in approximately equal amounts.

2. *Extremes of Cold Plus Temperature Changes:*
   (1) Extremes of Cold: Temperature sufficiently low to cause marked bodily discomfort unless the worker is provided with exceptional protection.
   (2) Temperature Changes: Variations in temperature which are sufficiently marked and abrupt to cause noticeable bodily reactions.

3. *Extremes of Heat Plus Temperature Changes:*
   (1) Extremes of Heat: Temperature sufficiently high to cause marked bodily discomfort unless the worker is provided with exceptional protection.
   (2) Temperature Changes: Same as 2(2).

4. *Wet and Humid:*
   (1) Wet: Contact with water or other liquids.
   (2) Humid: Atmospheric condition with moisture content sufficiently high to cause marked bodily discomfort.

5. *Noise and Vibration:* Sufficient noise, either constant or intermittent, to cause marked distraction or possible injury to the sense of hearing, and/or sufficient vibration (production of an oscillating movement or strain on the body or its extremities from repeated motion or shock) to cause bodily harm if endured day after day.

6. *Hazards:* Situations in which the individual is exposed to the definite risk of bodily injury.

7. *Fumes, Odors, Toxic Conditions, Dust, and Poor Ventilation:*
   (1) Fumes: Smoky or vaporous exhalations, usually odorous, thrown off as the result of combustion or chemical reaction.
   (2) Odors: Noxious smells, either toxic or nontoxic.
   (3) Toxic Conditions: Exposure to toxic dust, fumes, gases, vapors, mists, or liquids which cause general or localized disabling conditions as a result of inhalation or action on the skin.
   (4) Dust: Air filled with small particles of any kind, such as textile dust, flour, wood, leather, feathers, etc., and inorganic dust, including silica and asbestos, which make the workplace unpleasant or are the source of occupational diseases.
   (5) Poor Ventilation: Insufficient movement of air causing a feeling of suffocation; or exposure to drafts.

Technical Advisory Committee on Curriculum Planning

T O U R I S M

The Technical Advisory Committee on Curriculum Planning for Montana's Tourism industry was composed of members from business, industry, local, state, and federal government as well as persons with special expertise.

Members were charged with providing a comprehensive definition of job clusters relevant to Montana's tourism industry. The members chose the following clusters as the definitive areas of Montana's tourism and travel industry:

a) Lodging Services
b) Travel Services
c) Recreation Services
d) Entertainment Services
e) Cultural Services
f) Food and Beverage Services
g) Sports-Related Services

Tourism committee members stressed that education and training are vitally important to foster economic growth and ensure success in these service-oriented businesses. Basic primary skills in communication and dealing with the public, along with specific technical skills, were named as top training priorities.

Committee members strongly believe that students need the following training skills in all areas of the Tourism industry to achieve success in employment:

a) general knowledge of the tourism industry and Montana history
b) general ability to market industry goals at the local, state, and federal levels
c) people skills
d) how to present a positive image
e) general basic educational skills, (i.e. reading, writing, speaking and computing)
f) appropriate technical skills and motivation to apply those skills in the job
g) a knowledge of basic work habits, (i.e. being on time, following directions, cooperative teamwork on the job)

In creating the specific job clusters for Montana's tourism industry, it should be noted that some job titles require at least a baccalaureate degree or more comprehensive training for entry-level employment. Those jobs of managers, directors, publicity and or/sales and marketing managers, recreation planners, curators and archivists have traditionally required more than a two-year associate or vocational-technical degree.

It was noted that the growth and development of the tourism/travel industry has become a priority for government, business and industry, and education in Montana. Members forecasted continued growth and sophistication of this market and hoped that through increased curriculum development in vocational education, the needs of our future workforce will be met.

T O U R I S M

Skill Areas For:
A. Food and Beverage Services
B. Travel Services
C. Lodging Services
D. Recreation, Entertainment, Cultural, Sports

DUTY NO.	TASK DESCRIPTION	Food & Beverage	Travel Services	Lodging Services	Entertainment, Cultural, & Sports
A.	PERFORMING GUEST/VISITOR/CLIENT SERVICES				
	-Provide information, answer questions, and explain rules and regulations to visitors and users	X	X	X	X
	-Requests visitors and users to voluntarily comply with rules and regulations		X	X	X
	-Investigate accidents, complaints, disturbances, and other problems	X	X	X	X
	-Maintain crowd control		X	X	X
	-Schedule property activities		X	X	X
	-Receive guests		X	X	X
	-Write order/ticker/reservation		X	X	X
	-Register guests		X	X	X
	-Greet/interact with guests	X	X	X	X
	-Post events	X	X	X	X
	-Secure guest's valuables in safe		X	X	X
	-Answer guest/client inquiries	X	X	X	X
	-Organize sightseeing tours		X	X	X
	-Conduct sightseeing tours		X	X	X
	-Perform housekeeping activities in lobby/waiting areas	X		X	X
	-Explain fees		X	X	X
	-Handle/process customer complaints	X	X	X	X
	-Take telephone orders	X	X	X	X
B.	PERFORMING CLERICAL DUTIES				
	-Answer/process telephone calls	X	X	X	X
	-Stock brochure racks	X	X	X	X
	-Process mail		X	X	X
	-Compose correspondence		X	X	X

DUTY NO.	TASK DESCRIPTION	Food & Beverage	Travel Services	Lodging Services	Entertainment, Cultural & Sports
	-Compile information for technical reports		X	X	X
	-Maintain alphabetical, numerical, and subject filing system		X	X	X
	-Compose abstracts of articles and reports		X	X	X
	-Duplicate materials on copying machine		X	X	X
	-Proofread typewritten copy		X	X	X
	-Type correspondence, forms, and reports		X	X	X
	-Complete forms	X	X	X	X
	-Schedule meetings	X	X	X	X
	-Maintain an appointment and calendar system	X	X	X	X
	-Use computer terminal and related programs	X	X	X	X
	-Operate telephone switchboard			X	
C.	PERFORMING PUBLIC RELATION DUTIES				
	-Develop and implement public relation program	X	X	X	X
	-Manage promotional programs	X	X	X	X
	-Establish marketing and promotional programs		X	X	X
	-Deal effectively with individuals and groups in a courteous and tactful manner	X	X	X	X
	-Draft/edit monthly newsletter		X	X	X
	-Convey information orally	X	X	X	X
	-Write and distribute news media releases		X	X	X
	-Work with tourism related and promotional projects	X	X	X	X
	-Coordinate with local and regional campaigns and services		X	X	X
	-Authorize brochure displays		X	X	X
	-Coordinate tours		X	X	X
	-Develop information kit		X	X	X
	-Establish working relationships with tour operators		X	X	X

DUTY NO.	TASK DESCRIPTION	Food & Beverage	Travel Services	Lodging Services	Entertainment, Cultural, & Sports
	-Meet and deal successfully with various types of people under circumstances which frequently involve influencing, motivating, leading, and controlling persons or groups----------	X	X	X	X
	-Establish and maintain communication links with individuals, groups, and agencies which may influence, affect, or have a vested interest (political, social, and/or economical)----------	X	X	X	X
	-Analyze and evaluate interests, habits, and demands of diversified groups-------	X	X	X	X
	-Identify and classify (inventory) existing and potential recreation areas, facilities, and services----------	X	X	X	X
	-Appraise needs for new and/or expanded (recreation) activity and use opportunities----------	X	X	X	X
	-Prepare comprehensive planning documents; i.e., activity plans, management plans, master plans, land use plans, etc., for both short and long-term management situations----------	X	X	X	X
	-Manage production of all brochures------	X	X	X	X
D.	PERFORMING SALES DUTIES & MARKETING PRODUCTS/SERVICE				
	-Manage promotional programs----------	X	X	X	X
	-Promote/sell conference/conventions-----		X	X	X
	-Develop convention services----------	X	X	X	X
	-Promote credit card sales and new account interest----------		X	X	
	-Write bid proposals and invitations-----	X	X	X	X
	-Present bid proposals----------	X	X	X	X
	-Collect bid proposals and invitations---	X	X	X	X
	-Assist local establishments with convention bids----------	X	X	X	X
	-Erect/arrange exhibits and displays-----	X	X	X	X
	-Conduct site tours----------	X	X	X	X
	-Plan/administer sales program----------		X	X	X
	-Plan/prepare promotional materials------	X	X	X	X
	-Develop advertising campaigns----------	X	X	X	X
	-Arrange for newspaper advertising-------	X	X	X	X

DUTY NO.	TASK DESCRIPTION	Food & Beverages	Travel Services	Lodging Services	Entertainment, Cultural, & Sports
E.	PERFORMING CASH REGISTER DUTIES				
	-Accept and receipt customer's accounts receivable	X	X	X	X
	-Identify acceptable checks	X	X	X	X
	-Accept valid consumer redeemable coupons	X	X	X	X
	-Prepare cash drawer for daily business	X		X	X
	-Change cash register receipt tape	X		X	X
	-Fill out cash register summary sheet	X		X	X
	-Calculate unit price of multiple-price items	X	X	X	X
	-Correct cash register error	X	X	X	X
	-Process cash refunds	X	X	X	X
	-Make change	X	X	X	X
	-Write customer charges	X		X	X
	-Ring up orders of merchandise or service on the cash register	X		X	X
	-Manipulate cash register keys	X		X	X
	-Open/close cash register	X		X	X
	-Reconcile cash register	X		X	X
	-Cash checks	X		X	X
	-Verify cash amount in cash register	X		X	X
	-Verify cash amount turned in on each shift	X		X	X
	-Obtain authorization on credit cards	X	X	X	X
	-Receive cash payments	X	X	X	X
	-Receive/process credit card payments	X	X	X	X
	-Accept payment for check	X		X	X
F.	PERFORMING SAFETY/SECURITY AND SANITATION FUNCTIONS				
	-Conduct property inspection	X	X	X	X
	-Observe and report hazardous conditions	X	X	X	X
	-Assist accident victims	X	X	X	X
	-Respond to medical emergency	X	X	X	X
	-Investigate/handle accidents and disturbances	X	X	X	X
	-Prepare/process accident report	X	X	X	X
	-Develop security and safety policies/ procedures	X	X	X	X

DUTY NO.	TASK DESCRIPTION	Food & Beverages	Travel Services	Lodging Services	Entertainment, Cultural & Sports
	-Assist in maintaining establishment security----------	X	X	X	X
	a. Maintain security of establishement				
	-Deal with robbery attempts----------	X	X	X	X
	a. Investigate reports of theft				
	-Respond to fire emergency----------	X	X	X	X
	-Inspect facility for compliance with health and sanitation laws----------	X	X	X	X
	-Develop and implement a hazardous chemical communication program----------	X	X	X	X
	-Exterminate rodents----------	X		X	X
	-Exterminate insects----------	X		X	X
	-Promote visitor and user/guest health safety through monitoring resource conditions (i.e., water quality, know hazards, etc.)----------	X	X	X	X
G.	PERFORMING INSPECTION AND MAINTENANCE DUTIES				
	-Assess and record the physical condition of grounds and building exterior--------	X		X	X
	-Inspect and test condition of grounds equipment----------	X		X	X
	-Mow and edge grass----------			X	X
	-Trim shrubs----------			X	X
	-Service power mower----------			X	
	-Inspect piping for leaks----------	X		X	X
	-Inspect plant tools----------			X	X
	-Inspect plant equipment----------			X	X
	-Inspect gauges and instruments for accuracy----------	X	X	X	X
	-Check testing equipment for accuracy----	X		X	X
	-Inspect water supply for required level-			X	X
	-Perform preventive maintenance inspection----------	X	X	X	X
	-Inspect water, irrigation, electrical, gas, sewer, and communication systems for leaks, breaks, spills, and other mechanical malfunctions----------	X		X	X

DUTY NO.	TASK DESCRIPTION	Food & Beverage	Travel Services	Lodging Services	Entertainment, Cultural, & Sports
	-Perform preventative and scheduled maintenance activities, and make necessary repairs/replacements to deteriorated grounds and facilities	X		X	X
	-Disassemble and clean buffing machine			X	X
	-Disassemble and clean wet/dry vacuum			X	X
	-Ease sticking drawers	X		X	
	-Empty and clean carpet vacuum	X		X	
	-Free sticking doors	X		X	X
	-Free window from sash			X	X
	-Glaze windows			X	X
	-Replace floor tile			X	X
	-Replace faucet components	X		X	X
	-Replace burned-out light bulbs or flourescent bulbs and tubes	X		X	X
	-Replace light switches			X	X
	-Spot paint			X	X
	-Tighten loose furniture components	X		X	X
	-Unclog drains/grease traps	X		X	X
	-Perform preventative and regularly scheduled maintenance on all tools and equipment	X		X	X
	-Water plants			X	X
	-Fill gas tanks	X	X	X	X
	-Service vehicles		X	X	X
	-Align block bearings, drive shafts, pumps, and motors			X	X
	-Change charts, ink levels, and points of recorders			X	X
	-Change oil in motors and pumps			X	X
	-Grease fittings on equipment			X	X
	-Repack valves			X	X
	-Replace broken part on bar screens			X	X
	-Replace broken valves			X	X
	-Replace broken diffuser plates and tubes			X	X
	-Replace broken underground parts			X	X
	-Replace broken shoes on grit removal equipment			X	X

DUTY NO.	TASK DESCRIPTION	Food and Beverage	Travel Services	Lodging Services	Entertainment, Cultural & Sports
	-Inspect grounds and landscape areas (i.e., turf areas, ball-fields and playfields, parking areas, formal gardens and bedding areas, median strips, memorials and cemeteries, edging, trimming and raking, seeding and reseeding, fertilizing, pruning, spraying, cleaning, and litter pickup, etc.----------			X	X
H.	PERFORMING PERSONNEL DUTIES				
	-Demonstrate use of equipment----------	X	X	X	X
	-Formulate employee rules and regulations----------	X	X	X	X
	-Schedule work assignments----------	X	X	X	X
	-Orient newly hired personnel/volunteers-	X	X	X	X
	-Recruit/interview personnel/volunteers--	X	X	X	X
	-Conduct employee training----------	X	X	X	X
	-Develop employee training plans---------	X	X	X	X
	-Conduct employee performance evaluations	X	X	X	X
	-Discharge employee----------	X	X	X	X
	-Record/verify employee hours----------	X	X	X	X
	-Supervise personnal/volunteers----------	X	X	X	X
	-Write a job description----------	X	X	X	X
	-Prepare employee work schedule/assign duties----------	X	X	X	X
	-Plan physical layout of office----------	X	X	X	X
	-Update office manual or instruction book for employees/volunteers----------	X	X	X	X
	-Provide employees/volunteers with support materials----------	X	X	X	X
	-Develop employee/volunteers communication programs and skills----------	X	X	X	X
	-Compute employee time worked for payroll	X	X	X	X
I.	PERFORMANCE MANAGERIAL DUTIES				
	-Write business letters----------	X	X	X	X
	-Control operations----------	X	X	X	X
	-Follow credit policies/procedures-------	X	X	X	X

DUTY NO.	TASK DESCRIPTION	Food & Beverages	Travel Services	Lodging Services	Entertainment, Cultural, & Sports
	-Develop/implement operating policies/ procedures	X	X	X	X
	-Write periodic reports (i.e., monthly, mid-year, end of year, etc.	X	X	X	X
	-Attend agendas for board meetings		X	X	X
	-Maintain tickler file		X	X	X
	-Evaluate programs	X	X	X	X
	-Prepare a performance report	X	X	X	X
	-Attend Board of Director's meeting		X	X	
	-Act as a liaison with local merchants/ groups	X	X	X	X
	-Maintain inventory	X	X	X	X
	-Order supplies (non-food and kitchen)	X	X	X	X
	-Verify invoices/receipt of ordered supplies	X	X	X	X
	-Issue supplies	X	X	X	X
	-Open establishment	X		X	
	-Close establishment	X		X	
J.	PERFORMING FISCAL MANAGERIAL DUTIES				
	-Compute prices	X	X	X	X
	-Cost out items	X	X	X	X
	-Develop operational budgets	X	X	X	X
	-Prepare business forecast	X	X	X	X
	-Calculate profitability of facilities/ services	X	X	X	X
	-Prepare statistical reports		X	X	X
	-Maintain cash flow programs		X	X	X
	-Maintain standard accounting program	X	X	X	X
	-Reconcile monthly bank accounts	X	X	X	X
	-Determine optimum process for reproducing printed materials	X	X	X	X
	-Prepare budgets	X	X	X	X
	-Prepare statements for mailing		X	X	X
	-Audit daily business	X	X	X	X
	-Prepare financial reports	X	X	X	X
	-Track budget expenditures	X	X	X	X
	-Perform bookkeeping	X	X	X	X
	-Reconcile billing errors	X	X	X	X
	-Identify specific program needs for budgetary purposes	X	X	X	X

DUTY NO.	TASK DESCRIPTION	Food & Beverage	Travel Services	Lodging Services	Entertainment, Cultural, & Sports
	-Collect overdue accounts----------		X	X	X
	-Compile/write operating reports---------	X	X	X	X
	-Make bank deposits----------	X	X	X	X
	-Complete excessive charges report--------	X	X	X	X
	-Compute average dollar amount spent by guest----------	X	X	X	X

S U M M A R Y

Montana's tourism and travel industry will expect a steady growth rate in the next decade and must, therefore, train its workers to meet increased demands.

Service workers in all fields, according to the technical committee, must acquire substantial communication and people skills to satisfactorily perform their duties.

Basic human relations, combined with a solid general education, will enable vocationally-trained tourism workers to meet their personal and professional goals.

Specific vocational skills should be developed into curriculum programs to train tourism workers, the committee stated.